

REMARKS

Claims 1-8 are pending in the above identified-application. Support for the changes to claim 1 is found at pages 7-8 of the present specification. New claims 2-8 is found at pages 6-9 of the present specification.

Removal of Disclosure Objection

The disclosure of the present specification has objected too because the status of the parent application had not yet been updated. This has been resolved by the above-noted change to the specification which includes the updated information for the parent application. Thus, it is requested that this objection be withdrawn.

Issues under 35 U.S.C. § 103(a)

Claim 1 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Klebe '092 (USP, 4,503,092) in view of Ohta '256 (US 2002/0155256 A1). This rejection is traversed for the following reasons.

Present Invention Its Advantages

According to the present invention, the fluidization vessel is divided into a hydrophobizing section or device for hydrophobization and a deacidifying section or device for deacidification. Silica hydrophobization is carried out in the hydrophobizing section or device, and halogen gas, such as chlorine, which accompanies the silica from the hydrophobizing section or device is removed in the deacidifying section or device. In the hydrophobizing section or device, the silica is fluidized with an inert gas, generally nitrogen (N₂), and is treated with a hydrophobizing agent. In the deacidifying section or device, the silica is fluidized with an inert

gas, typically nitrogen, and subjected to deacidification. Water is typically added to the fluidizing gas so that deacidification can be carried out in a water-containing atmosphere.

Since the fluidization vessel of the present invention is divided into a hydrophobizing section or device and a deacidifying section or device, silica hydrophobization and deacidification are conducted separately thereby attaining and ensuring an advantageously high efficiency and reliability of the hydrophobizing treatment and deacidification treatment.

Distinctions between Present Invention and Klebe '092

Klebe '092 fails to disclose or teach that a fluidization system is divided into a hydrophobizing section or device and a deacidifying section or device. In Klebe '092, silica hydrophobization and deacidification treatment are conducted only in the sole fluidized bed reactor which does not separate a deacidifying section or device. Accordingly, the efficiency and reliability of silica hydrophobizing treatment and deacidifying treatment is inferior in Klebe '092. Moreover, in Klebe '092 the reaction waste gases, consisting of hydrophobized silica, dimethyldichlorosilane, hydrogen chloride, nitrogen and steam are returned via line 13 and introduced to the suction side line of the conveying apparatus 7.

On the other hand, in the apparatus of the present invention, the hydrophobic silica fine powder which passes out of the fluidization vessel including both hydrophobizing section or device and deacidifying section or device is collected by the second cyclone and the second filter, and the thus collected hydrophobic silica is returned to the deacidifying section or device. Therefore, the apparatus of the present invention differs significantly from Klebe '092 in this respect. The productivity of hydrophobic silica in Klebe '092 would be inferior since the hydrophobic silica collected and returned via line 13 is repeatedly treated with a hydrophobizing agent such as dimethyldichlorosilane.

Consequently, significant patentable distinctions exist between the present invention and Klebe '092. In addition, Klebe '092 fails to address or recognize the advantageous achieved by

the present invention with regards to advantageously improve efficiency and reliability with respect to the hydrophobizing treatment and deacidification as noted above, such that an attempt to assert prima face obviousness fails because these unexpected advantages rebut such a position.

Distinctions between Present Invention and Ohta '256

Ohta '256 discloses ink jet recording materials. Ohta '256 is farther removed from the present invention than Klebe '092, such that all of the above-noted distinctions over Klebe '092 also apply to Ohta '256. In addition, significant inconsistent features exist between Ohta '256 and Klebe '092, such that these references can not be combined together. For example, Ohta '256 employs processing parameters and apparatus components that significantly differ from those described in Klebe '092. Consequently, significant patentable distinctions exist between the present invention and Ohta '256, whether taken separately or improperly combined with Klebe '092.

It is submitted for the reasons stated above that the presently pending claims define patentable subject matter such that this application should now be placed in condition for allowance.

If the Examiner has any questions regarding the above matters, please contact Applicant's representative, Andrew D. Meikle (Reg. No. 32,868), in the Washington Metropolitan Area at the phone number listed below.

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Docket No.: 0171-1068P

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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